CLASS COPY: DO NOT WRITE ON

Write the slope-intercept form of the equation of the line described.

1) through: $(5, 3)$, parallel to $y = \frac{3}{10}x$

2) through: $(-2, -3)$, parallel to $y = x + 5$

3) through: $(5, -2)$, parallel to $y = -2x + 4$

4) through: $(-3, 5)$, parallel to $y = -\frac{7}{3}x - 5$

5) through: $(-5, 4)$, parallel to $y = -\frac{3}{5}x + 3$

6) through: $(5, 0)$, parallel to $y = \frac{1}{5}x + 2$

7) through: $(-5, -2)$, parallel to $y = 5x + 4$

8) through: $(-4, -1)$, parallel to $y = -x + 5$

9) through: $(-5, 3)$, parallel to $y = -\frac{1}{5}x + 4$

10) through: $(-5, 0)$, parallel to $y = -\frac{1}{10}x - 2$

11) through: $(1, 5)$, perp. to $x = 0$

12) through: $(3, 5)$, perp. to $y = -\frac{3}{7}x - 4$

13) through: $(1, -3)$, perp. to $y = \frac{1}{3}x - 5$

14) through: $(3, 0)$, perp. to $y = -\frac{3}{5}x - 1$

15) through: $(2, -3)$, perp. to $y = -2x - 4$

16) through: $(4, -1)$, perp. to $x = 0$

17) through: $(-5, 5)$, perp. to $y = 0$

18) through: $(2, -1)$, perp. to $y = 2x - 3$

19) through: $(-3, 3)$, perp. to $y = \frac{3}{7}x - 2$

20) through: $(-5, 2)$, perp. to $y = \frac{6}{5}x - 3$

Parallel and Perpendicular Lines

Here are some equations of straight lines:

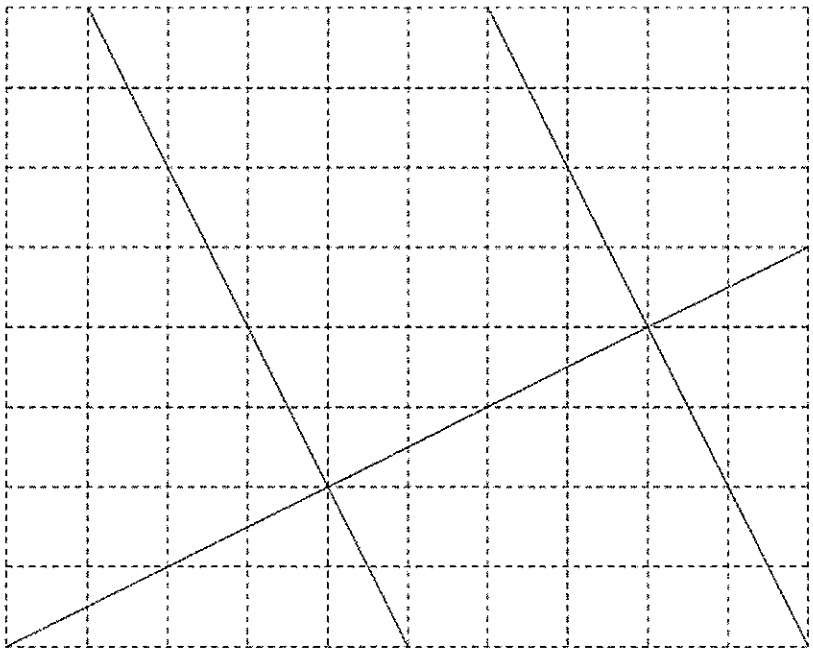
$y+2x=8$	$2y+\frac{1}{2}x+1=0$	$4y-x=1$	$y=x-4$	$y=2(x-1)$
$2y=x-4$	$y+2x+2=0$	$y=\frac{1}{2}x+2$	$y=4-x$	$2y=4-x$

1. Which four lines form the four sides of a rectangle?

   Explain your reasoning carefully.

2. Complete the drawing below to show the four lines and the x- and y-axes.

   Label the lines clearly.



Test Review

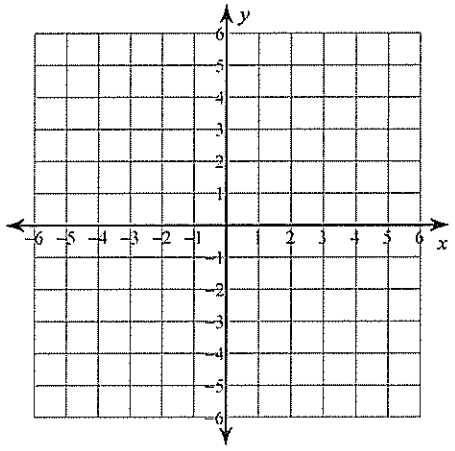
Name_____

Geometry

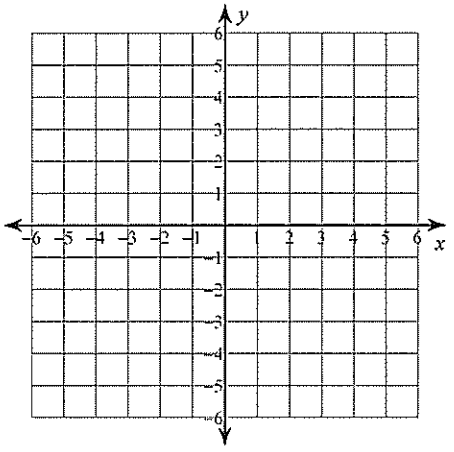
Date_____ Period____

Sketch the graph of each line.

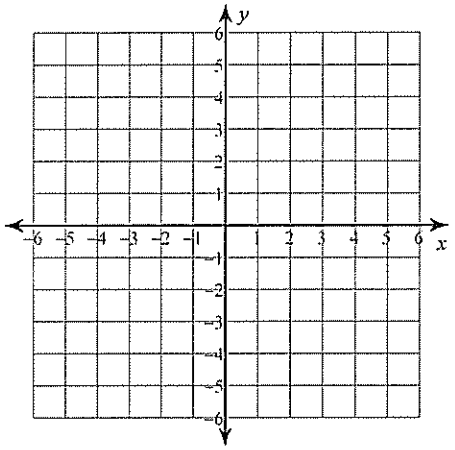
1) x-intercept = –5, y-intercept = 3



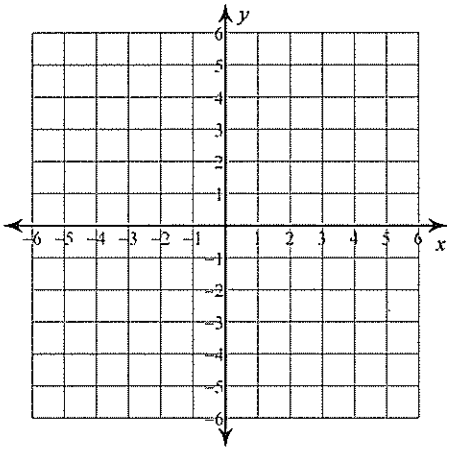
2) x-intercept = –1, y-intercept = –3



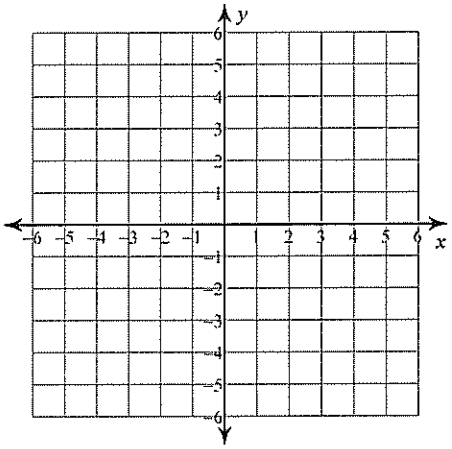
3) x-intercept = 3, y-intercept = –3



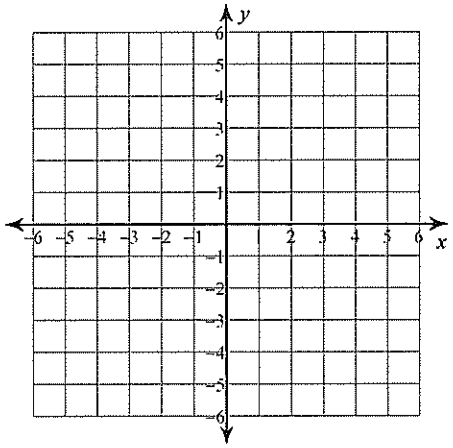
4) x-intercept = 5, y-intercept = 5



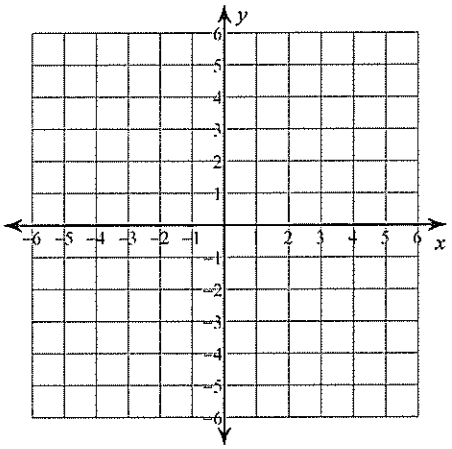
5) $2x + 5y = 5$



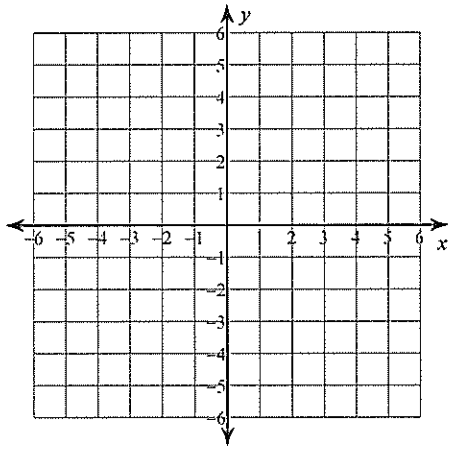
6) $3x - y = 4$



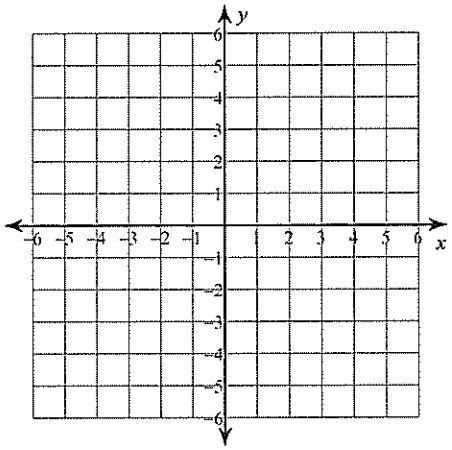
7) $3x - y = -3$



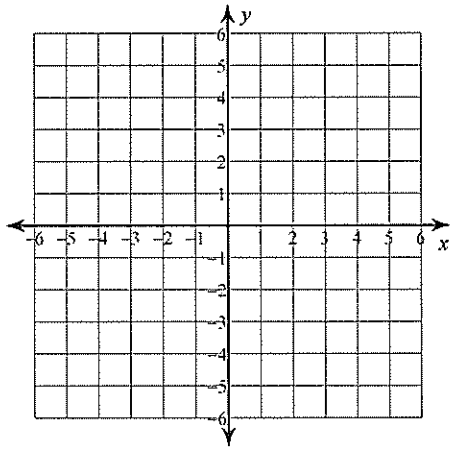
8) $x + y = 1$



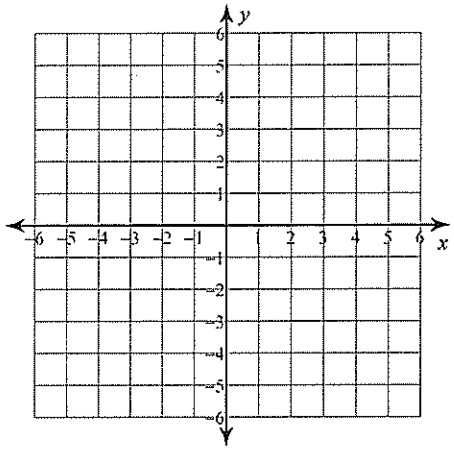
9) $y = -\frac{4}{3}x - 3$



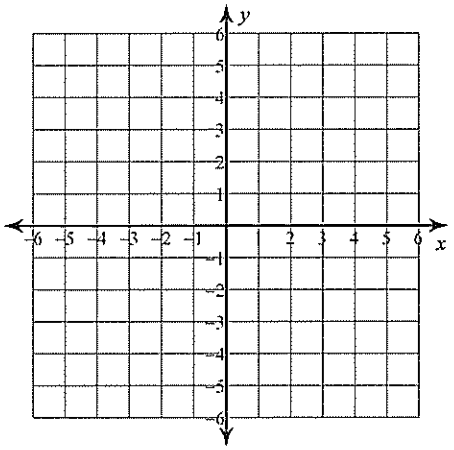
10) $y = -\frac{5}{4}x + 1$



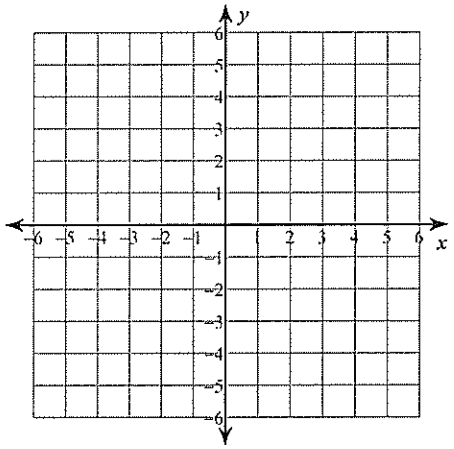
11) $y = 9x + 4$



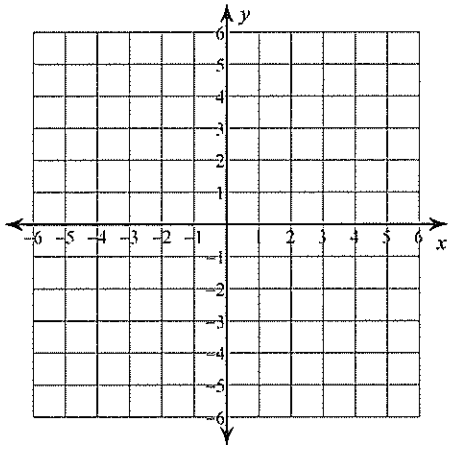
12) $y = -x - 3$



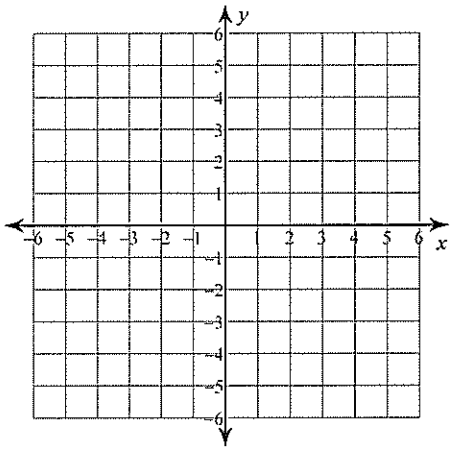
13) $27x + 6y = -30$



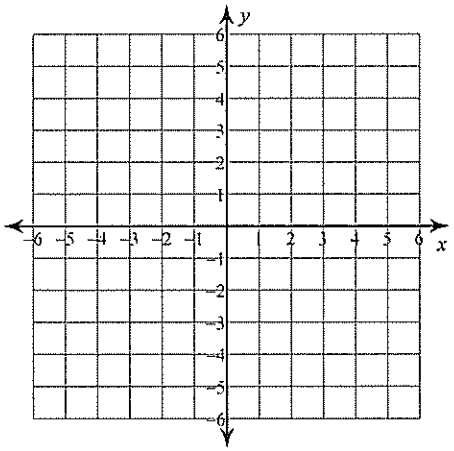
14) $x = y - 2$



15) $x + 1 + y = 0$

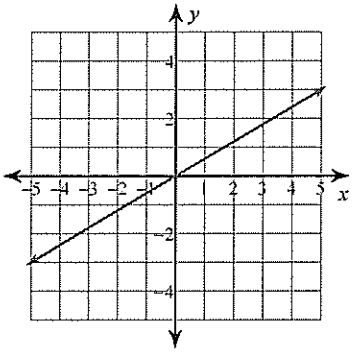


16) $45 + 24x - 15y = 0$

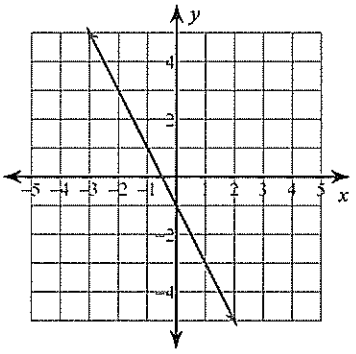


Write the slope-intercept form of the equation of each line.

17)



18)



Write the slope-intercept form of the equation of each line given the slope and y-intercept.

19) Slope $= -\frac{2}{3}$, y-intercept $= 1$

20) Slope $= \frac{8}{5}$, y-intercept $= 5$

Write the slope-intercept form of the equation of the line described.

21) through: $(4, 0)$, perp. to $y = -5$

22) through: $(5, 3)$, perp. to $y = -5x - 5$

23) through: $(-1, -1)$, perp. to $y = \frac{1}{2}x + 3$

24) through: $(-3, 0)$, perp. to $y = -\frac{3}{2}x - 3$

25) through: $(-2, 2)$, parallel to $y = -x + 1$

26) through: $(-3, 3)$, parallel to $x = 0$

27) through: $(-4, 1)$, parallel to $y = x + 3$

28) through: $(2, 3)$, parallel to $y = 2x + 5$

Write the standard form of the equation of the line described.

29) through: $(4, 1)$, perp. to $y = -4x + 3$

30) through: $(2, 5)$, perp. to $x = 0$

31) through: $(-1, -4)$, perp. to $y = -x - 1$

32) through: $(2, -1)$, perp. to $y = 7x - 4$

33) through: $(-5, -5)$, perp. to $y = -\frac{5}{4}x + 4$

34) through: $(-2, 0)$, perp. to $y = x + 3$